PERCEPTIONS OF THE DEVELOPMENT OF WILDLIFE CONSERVATION IN INDIA, HIGHLIGHTING THE PAST QUARTER CENTURY, AND THE INPUT OF THE U.S. FISH AND WILDLIFE SERVICE THROUGH THE BOMBAY NATURAL HISTORY SOCIETY AND THE WILDLIFE INSTITUTE OF INDIA

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The Indian subcontinent has a rich natural heritage that has been largely maintained historically because of the traditional respect for all life forms by the local peoples. Increasing pressures from a rapidly growing human population have brought about deterioration of habitats and elimination of species. These pressures and their consequences have gradually gained more attention over the years, but in the last quarter century, a sea change in the actions and concerns of not only the Government of India but also a number of organisations, have attracted widespread attention. The Bombay Natural History Society (BNHS), a major non-governmental organisation, and the Wildlife Institute of India (WII), a major Government of India institution, are making a difference in this battle and have benefited from the input of international partners such as the U.S. Fish and Wildlife Service (USFWS). Details of the two and a half decade relationship of the Service's contribution to India's conservation movement through the BNHS and WII are provided, reflecting the benefits of long-term commitment and working together for India's wildlife heritage.

INTRODUCTION

What we know as the present-day Indian subcontinent is a diverse landmass with a rich natural fauna and flora where some of the world's earliest known human civilisations flourished over 5,000 years ago. There are signs that these early civilisations not only recognised and used the rich, natural biological diversity around them, but developed views and policies governing use of these resources mirrored in their sacred writings, the Vedas and Upanishads. These teachings on reality and morality linked to the five elements of nature, "earth, water, fire, air and ether," laid down over three millennia ago, are recognisable today and parallel modern-day thinking on ecology and ecological relationships.

The legacy of recognition of, traditional respect for, and protection of, all life forms by the peoples of India, has resulted in the maintenance of a rich natural heritage. This legacy was also bolstered by the actions of royalty such as Emperor Ashoka, who created reserves of forests and issued edicts on the values of forests and wildlife, describing acceptable behaviour, and prohibited activities which could damage renewable natural resources. While the forest resources were often subsequently used by the kings and their guests for hunting and were off limits to others, their value as protected areas has survived to the present, as many of the former royal preserves now form the bulk of the national parks and conservation areas network.

Since the last part of the 19th century and early part of the 20th, many of the remaining patches of forest and rangeland came under the administrative hand of State Forest Departments established under the British Raj for the primary purpose of managing them for forest produce, particularly timber. Despite the difficult transition during the post-independence period and the desperate need for resources from a rapidly growing human population, the major wild land resources represented in the forest preserves were

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able to survive because of the Forest Department establishment.

Concurrent with the Government's actions to more formally protect and manage India's forests, the emergence of non-governmental interests, in the late 1800s, to focus attention on other components of the biological realm was an interesting phenomenon. Among the first of these groups was the Bombay Natural History Society (BNHS) which championed the study of natural history in all its forms. Added to the more scientific studies conducted by the BNHS, the writings of colonials, wildlife observers, shikaris (hunters), and foresters began to reveal the marvels of India's wildlife.

The achievements of the BNHS over its first century have been documented elsewhere. Likewise, the importance of foresters, the evolution and management of wild lands, the institutional description and linkage to wildlife and wildlife management has been widely chronicled. Despite these advances, gaps between information on wildlife and their habitats and management responses by the Forest Department remained great.

In the late 1950s and early 1960s, India's wildlife scene started to pique the interest of the international community. One of the earliest ventures was what became a decades-long relationship between the BNHS and the United States' Smithsonian Institution, focusing on the study of birds. Dr. George Schaller of the New York Zoological Society ushered in a new era with the pioneering study of chital and tiger at Kanha National Park, which employed some recently evolving techniques, merging scientific method with the behavioural study of animals and their habitats.

The 1969 IUCN General Assembly, held in New Delhi, could perhaps be viewed as a watershed for the subsequent events that triggered multiple actions affecting the wildlife conservation movement in India — a chain of events perhaps unparalleled anywhere else in the world. This meeting brought together international conservation leaders and conservationists in India, including a small group of influential Indian businessmen, academicians, foresters and politicians (chief among whom was the then Prime Minister, Indira Gandhi). Problems were discussed, the plight of the tiger was highlighted, and recommendations were made.

The key to the future development and implementation of recommendations from the 1969 meeting was the dedication and determination of Mrs. Gandhi. In 1970, a 6 month duration course in wildlife management was initiated in the Indian Forest Research Institute (FRI) for in-service Forest Officers, the first such course devoted specifically towards wildlife. With the full support of Mrs. Gandhi, the Wildlife (Protection) Act was enacted in 1972. Under this landmark legislation, wild animals and birds were given protection through the creation and establishment of wildlife advisory boards, hunting regulations, sanctuaries, national parks and protected areas, wildlife officer position, policies on trade and commerce in wild animals and animal products, and a list of protected species. In 1973, Project Tiger was launched, and eight reserves were designated specifically as tiger reserves.

At the request of the Government of India (GOI), the Food and Agriculture Organization (FAO) of the United Nations Development Programme (UNDP) sent a consultant to India in 1974 to assess the crocodile situation and recommend a programme for crocodile farming. The relationship with FAO led to a number of visits, creation of a captive breeding facility at Hyderabad, a long-term restoration programme for gharial and other crocodilian species, and a major contribution to what later became the Wildlife Institute of India (WII).

In 1976, India's Constitution was amended to allow the states to legislate forestry and wildlife matters within their jurisdictions.

In the mid 1970s, the scene was set for the entrance of another, perhaps unlikely, international

player, the U.S. Fish and Wildlife Service (FWS). Over the next quarter century up to the present, the FWS has been engaged in a major wildlife conservation programme with the GOI. This programme, facilitated through local institutions such as the BNHS and the WII, has influenced and, hopefully, productively altered the organisation and application of wildlife research and management in India and the surrounding region. It is recognised that major milestones were occurring due to actions taken at the highest levels of the GOI. A variety of other activities were also going on, some as a result of the major events, some as catalysts for these events, and some that came about synergistically because of FWS input.

U.S. Fish and Wildlife Service and its Mission

As the principal U.S. Federal agency responsible for conservation of wildlife, the FWS has a mission to promote fish and wildlife conservation and species enhancement, both inside and outside U.S. boundaries. In 1973, a special directive was given to the FWS with the passing of the Endangered Species Act (Public Law 93-205). The Act not only charges the FWS to determine the status of threatened and endangered species worldwide, but also allows U.S. assistance to be offered to foreign nations for the development and management of programmes necessary or useful for threatened or endangered species conservation. While the drive behind FWS's international programme is conservation of endangered species and their habitats, it was recognised that the best way to proceed would be to engage and help existing local institutions in other countries strengthen their abilities and skills. An approach was developed that sought out conservation-oriented projects, focusing on research, management, education and training, which could be addressed by local institutions. By linking with various U.S. organisations that could provide the technical expertise not available with FWS and/or additional financial or other administrative or technical support, the FWS was able to marshal finances, technical expertise, and logistical support that have made permanent contributions to a multitude of issues.

FWS and the BNHS

Fortuitously, early FWS engagement with the GOI in the late 1970s was directed towards BNHS, not only because of its pre-eminent position and long history in facilitating bird studies in the Subcontinent, but because it was the only major organisation in India at the time, with technical personnel experienced in natural history research. Spirited by the leadership of Dr. Sálim Ali, the BNHS developed several multi-year project proposals for Indo-US cooperation. The first of these major projects to be endorsed by the GOI was a 5-year effort starting in 1979 to monitor movements and habitats of birds. This was quickly followed by two other 5 year projects in 1980, the first an ecological study at what is now Keoladeo National Park and the second on the ecology of the Asian elephant and great Indian bustard.

To date, the FWS has supported 16 major multi-year conservation-oriented research projects with the BNHS, covering 68 project years and including studies on Bengal and lesser floricans, birds of prey, wolves and blackbuck, hill stream ecology, wetland ecology, grassland ecology and many others. Each project is conservation-oriented, implemented by the BNHS with local personnel, has training as an important component, and is done in conjunction with the local state government (Forest Department). The focus is to arrive at practical management options in order to address resource issues and make some permanent contribution to the knowledge base of the country.

Besides the hundreds of peer-reviewed scientific publications produced by these projects, nearly 70 young and emerging Indian scientists

have got their start or added to their experience through participation in various FWS supported projects. A total of 27 researchers of the BNHS obtained their doctoral degrees, with many more obtaining M.Sc. degrees, while working in FWS funded projects. Several of these wildlife scientists now play crucial roles in the wildlife research and conservation scenario in India.

A number of projects, while fulfilling their original objectives, often created new questions to be asked, and were either extended or reformed into new proposals. The original 5 year avifauna project was extended to 7 years and spawned two subsequent projects, one 5 year project on bird migration and a 3 year bird banding project. The original 5 year project on the hydrobiology of Keoladeo National Park was extended to 10 years and became one of the most comprehensive ecological studies of an ecosystem in Asia. The Birds of Prey project gave rise to 3 additional studies, and so on. This is how science works. Questions are posed as a hypothesis, then tested to see if the hypothesis works. Along the way all kinds of new questions and information arise.

The full impact of these projects with the BNHS, as well as other projects supported by the FWS with other organisations, is seen in the ecological approach they brought to all studies of species and their habitats. Species were no longer viewed as inanimate objects to be studied without context, but as parts of dynamic natural systems that function or do not function in an interdependent manner. If one part of the system is affected, the effects are generally felt in the rest of the system. Indian wildlife scientists were becoming recognised internationally for their ground-breaking work.

A more complete treatment of the BNHS/ FWS cooperative partnership in these long-term projects can be found in Anon. (2000) and Ferguson (2002), including lists of publications, theses, project reports, presentations, and a list of the biologists in their present positions who worked in the BNHS/FWS projects.

Besides the FWS support to the many long-term BNHS conservation research studies, the partnership was further strengthened through a variety of other activities which have fed back into India's conservation movement. FWS has facilitated the participation of BNHS personnel in international scientific meetings to present findings from project related research. This not only provides them with the opportunity to disseminate information on India's natural systems to the international community, but also provides them with experience in representing India, builds self-confidence, and helps them make contacts with potential cooperators and collaborators.

The FWS has also provided opportunities for BNHS scientists to visit American and other foreign institutions and field sites for training, interaction with scientific peers, making contacts and confidence building. These opportunities invariably serve to open minds and present alternative approaches to problem solving and ways to do things.

Top U.S. and European wildlife biologists, managers and administrators have been sent to India by FWS for interaction and information exchanges with BNHS colleagues. Many of these relationships have blossomed and endured for lifetimes, creating new opportunities and exchanges between personnel and institutions.

Believing in the need for a good library and reference collection of scientific information, the FWS has attempted to maintain a flow of scientific literature to the BNHS' main reference collection in Mumbai, as well as to individual scientists at their field sites upon request. A rough estimate of the number of such books, publications and environmental education materials would number in the thousands.

Joint efforts with the BNHS on other activities such as environmental education and public awareness have also created multiple effects. The 1983 publication of A PICTORIAL GUIDE TO THE BIRDS OF THE INDIAN SUBCONTINENT arose out

of the recognition that good illustrations of birds were fundamental for identification and field observation and no single-volume publication existed that depicted all 1,200+ species of the Indian subcontinent. Beginning with an effort in 1979, the FWS and BNHS persevered in this first attempt to include 1,241 species in a one-volume bird guide that could be taken to the field. John Henry Dick, the well-known American bird painter, provided the 106 illustrations free of charge, as did the authors of the text, Drs. Sálim Ali and S. Dillon Ripley, as a tribute to the seminal work of the BNHS in raising public awareness in natural history and nature conservation.

With financial assistance from the FWS, this publication was offered to the public on a non-profit basis, in order to assure its widest possible distribution and diffusion of knowledge concerning India's rich ornithological heritage among low and middle income groups, among government and private scientific, cultural and educational institutions. The guide has become a mainstay in the BNHS publication offerings, with repeated reprinting to meet public demand, and enabling well-informed citizenry to participate in the appreciation and conservation of wildlife and its habitats, and hence, in the preservation of a healthy natural environment. Proceeds from sales of the book also help support the production of other BNHS publications aimed at creating awareness of our natural world.

1983 was highlighted as the centennial year of the BNHS. A year-long series of events was scheduled to suitably mark the occasion of this venerable institution's 100th birthday, culminating in an international seminar in Mumbai. The FWS supported the participation of 12 representatives from U.S. scientific institutions and universities, with prior experience in India, to attend the seminar and present results of their work, to add to the asset of growing data on the country's biodiversity. The FWS also invited representatives from the BNHS on a U.S. tour to promote the centennial celebration, disseminate information on BNHS activities and objectives, and attract a wider membership network. The BNHS group was led by its President and charismatic leader, 87 year old Dr. Sálim Ali, and included Mr. J.C. Daniel, Director and Curator, and Mrs. Dilnavaz Variava, a member of the BNHS Executive Committee. Making appearances in Washington, DC, Chicago and Baraboo, Wisconsin, the group made presentations, passed out literature, signed up new members, were fêted at various functions, and received funding donations.

One unusual, but significant action which occurred during his time, may have extended Dr. Sálim Ali's productive years. For many of his later years, the Old Man (as he was affectionately called) suffered from a hearing problem, which became so severe that it had become embarrassing for him to appear in public fora as he had difficulty hearing questions, and carrying on meaningful conversations. Though equipped with hearing aids, they often seemed to be more bothersome than helpful and BNHS requests for new batteries became a frequent call to the FWS. Concerned that this hearing impairment would detract from the effectiveness of the U.S. visit, Mr. Daniel confidentially asked the FWS to take the Old Man to a hearing specialist soon after arrival. The Old Man was tested and custom fitted with top-of-the-line hearing aids despite his truculence and unwillingness for this bother. Secretly paid for by donations from a number of U.S. admirers, the hearing aids — which the Old Man decided he liked when they allowed him to hear the calls of birds — remained a mystery to him as to how they came about. The rest of the U.S. tour was a success with the Old Man avidly interacting with his host, returning to India and actively pursuing his work for another four years until his death in June 1987. Prior to his death, he was honoured with an appointment to the Rajya Sabha (Parliament) by the Prime Minister in 1985, and used this platform to effectively raise the cause of conservation to the highest levels of the

government. It is conceivable that his improved hearing helped serve this mission more effectively.

Not to be overlooked, is the effect the BNHS/FWS long-term conservation projects had, on the growth and staff training of Indian wildlife institutions, particularly the BNHS and its offshoot, the Sálim Ali Centre for Ornithology and Natural History (SACON). Early on in the BNHS-FWS relationship, concern was expressed by the BNHS directorship that the projects were serving as excellent training vehicles for young biologists, but due to the "soft money" nature of their support, the BNHS had little or no ability to retain the best of these personnel once the projects came to an end. Several proposals addressing this problem were put forward to the GOI for consideration. The main objective was to create a mechanism within the BNHS structure to provide positions and work for the qualified project biologists. Unfortunately, the GOI never saw the same view as that proposed by the BNHS. The concept changed and energies were directed into a somewhat different channel that eventually led to the creation of SACON. Basically, the core staff from the BNHS ecological study at Keoladeo National Park moved to Coimbatore and formed the new research centre at Anaikatti. SACON continues to be led by a former BNHS researcher from the Keoladeo ecology study and employs a number of former BNHS staff and 'graduates' from the cooperative projects.

The FWS support for the BNHS continues to the present and BNHS continues to hold its pre-eminent position in studying, reporting on, and generating conservation actions for India's natural heritage.

FWS AND THE WII

As noted earlier, it was not until 1970 that formal instruction in wildlife management was offered through the Forest Research Institute (FRI) at Dehra Dun. Five years later, following some initial visits by an FAO consultant, FWS was requested by FAO to consider a request to train several Indian wildlife personnel in the U.S. Lack of funding prevented any actions at that time and it was not until 1980 that the FWS had much direct interaction with the programme that would one day become the WII. Perhaps the event that set the stage for future FWS involvement in India, from a formal standpoint, was the adoption of wildlife as a "High Priority" area of cooperation at an India-U.S. Joint Sub-commission on Science and Technology meeting in Washington, DC, in June 1977. The sub-commissions were high-level mechanisms to facilitate bilateral cooperation between the two countries. Subsequent bilateral fora continued to endorse this cooperation and foster a programme involving a broad array of interests. This mechanism has proved highly valuable in providing a forum where FWS, as a U.S. governmental agency, had access and a working relationship with the appropriate Indian governmental agency, in this case the Ministry of Agriculture. Discussions and training for serving wildlife conservation needs became a two-way street.

In an attempt to encourage India to become more networked into the global conservation community, the FWS sent a CITES (Convention on International Trade in Threatened and Endangered Species of Fauna and Flora) team to India in 1979 to discuss CITES implementation requirements and to review the agenda of the upcoming Second CITES Conference of Parties (COP) in Costa Rica with GOI officials. The GOI Joint Secretary, Ministry of Agriculture (Forests and Wildlife) attended the Costa Rica COP. The FWS provided support for the GOI Joint Secretary to attend the CITES Technical Meeting in Bonn in 1980, whereupon India officially joined CITES.

In the same year, 1980, at the GOI request, FWS sent two specialists in wildlife capture, immobilisation and radio tracking techniques to India to conduct training for Project Tiger personnel, representatives from WWF-India, and students from the wildlife classes at Dehra Dun.

Accompanying the U.S. technical team was a cinematographer who recorded the capture and immobilisation techniques on video. Copies of the videos were then made available to a number of Forest Department and Park offices as well as at the FRI, Dehra Dun. They have served as important training aids for many years. This activity was followed by the visit of a team of two FWS wildlife veterinarians to the FRI and the IVI facility at Izatnagar to present classes on wildlife diseases.

In 1981, India hosted the Third CITES COP in New Delhi. The FWS provided financial support for 15 participants from other countries and assisted with other administrative costs. With this meeting, India began several years of leadership in Asia on CITES issues. Also in 1981, India promulgated the Forestry Conservation Act which required permission of the Central Government before any forest land could be diverted to any non-forest use. India adopted the World Conservation Strategy, and joined a number of other International Conventions calling for global preservation of endangered species and their habitats — Wetland (RAMSAR) and Whaling in 1981, Migratory Species (BONN) in 1982, and the Indo-USSR Treaty on Protection of Migratory Birds in 1984.

During this period, Dr. Sálim Ali was pleading the case for more trained Indian biologists in all aspects of wildlife biology and management. This call translated into a month-long workshop on wildlife management techniques at Kanha National Park in January 1982. Sponsored by the FWS, the GOI, and the Madhya Pradesh Forest Department, the goal was to transfer wildlife ecology, management theory and techniques to 60 forest officers and biologists from Central and State Governments, universities and non-governmental wildlife organisations in India. Also present were representatives from Bhutan, Nepal, Pakistan, Sikkim and Sri Lanka. They gathered with 25 senior U.S. and FAO wildlife biologists and the same number of Indian foresters. The instructional material was converted into book form, distributed widely to all participants, and made available to a wider audience at a nominal cost. Some of the present WII curricular content resembles the syllabus of the Kanha workshop and many of the participants established important personal and professional links with their colleagues in India and abroad.

The concept of establishing a training school focusing on wildlife at the national level had been building up for some time. Recommendations and preliminary plans were formulated by the UNDP/FAO specialists and a draft plan was circulated at the Kanha Workshop. The Kanha Workshop proved to be a major catalytic action to the movement to create such an institute and helped decide on its eventual location.

Concurrent with the creation of the WII, there was a push to separate the administration of wildlife management from its existing position under the Forestry Department in the Ministry of Agriculture to a more independent position. Advocates strongly felt the need for a separate Ministry if wildlife was ever to get the attention it deserved. A high-level committee was commissioned in 1980 to study the matter and make recommendations to the Prime Minister. This culminated in a complete re-organisation of the Central Government's administration of natural resources, resulting in a new Department of the Environment which formally became the Ministry of Environment and Forests in 1985. In the process, wildlife was also separated from forestry, with the Forest Wing being headed by the Inspector General of Forests, and the Wildlife Wing headed by the Additional Inspector General of Forests (Wildlife). The newly created WII answers to the Additional Inspector General of Forests (Wildlife).

The charge of the new WII was to operate training courses for foresters in wildlife management and conduct field research to help formulate priorities and guidelines for wildlife

conservation. Despite challenges such as the lack of trained personnel for faculty positions, no organised curricula for its training programmes, no structural facilities for housing, and no precedent for breaking out of the insularity of the traditional education system, the organisers and planners moved steadily forward. A portion of the FRI at Dehra Dun was set aside for the WII programme. On May 22, 1982, the WII formally came into being as an autonomous body situated at Dehra Dun. With the UNDP and the GOI sharing the costs of the project, Mr. V.B. Saharia (a Forest Service officer in charge of the Wildlife Diploma Course at the FRI) was designated Acting Director for the new Institute with Dr. John Sale, formerly assigned to the UNDP/FAO crocodile project at Hyderabad, as the FAO Chief Technical Advisor.

In the next five years, a permanent Director, Mr. Hemendra Panwar, was selected. The positions and criteria for faculty were developed and staff selected, the Government of Uttar Pradesh donated land for a new campus, and plans for a new campus were designed and construction initiated. State foresters began receiving more specialised training in wildlife subjects.

In October 1988, the FWS and WII entered into a 5 year cooperative arrangement to train WII faculty in modern research techniques and provide equipment for use in wildlife training and research, including advanced computer hardware and software. Endorsed by the Governments of India and the U.S. under the Indo-U.S. Sub-Commission on Science and Technology, this innovative project has served as an excellent example of what a small bilateral technical development programme can achieve.

There were 12 subject areas originally decided upon, in wildlife ecology and management, but only 10 were dealt with in detail. The remaining two were not developed as full-fledged independent programmes. The programmes initiated included:

Wildlife in Managed Forests
Field Research Methods
Interpretation and Conservation Education
Geographic Information Systems
Systems Analysis
High Altitude Ecology
Wetland Ecology and Management
Wildlife Health
Animal Damage Control
Library and Documentation

Represented in the group of U.S. scientists, eventually totalling 33, who participated in this programme to transfer technology, was expertise from the FWS, U.S. Forest Service, National Park Service, a university and the private sector. Each expert stayed in India from 1 to 3 months and then hosted their counterpart for varying lengths of time during a study tour in the U.S. Under the programme, eighteen WII faculty members, including the Director and project nodal officers, visited scientific institutions, protected areas and other field locations in the U.S. to get acquainted with U.S. training programmes and management techniques. A final component of the exchange was a 'show and tell' workshop in India by the Indian and U.S. counterparts to demonstrate to WII faculty and other organisations and universities what was learned in the transfer.

Besides the wildlife courses for foresters developed at WII which included a 3 month Certificate, 10 month Diploma, and a number of 1 week specialised Capsule Courses, its premier programme is a 2 year M.Sc. course to foster original wildlife research and enquiry, often independent of the needs of the government. As a further reflection of the intellectual expansion, WII hosts a number of post-graduate Research Scholars from cooperating universities to carry out original field studies on subjects of mutual interest. The consequences of this movement away from the didactic, resource exploitative, hierarchical approach to a questioning, academically rigorous, independent and dynamic approach to wildlife research, cannot be overstated.

With the output of about 20 Diploma, 14 Certificate, and 75 Capsule Course participants each year, besides the 7 M.Sc. and 25 post-graduate Research Scholars at various stages of their studies, the WII had a tremendous impact in providing a direction and mass to the wildlife movement in India in the early 1990s. The WII/ FWS project has been immensely successful in achieving its objective of facilitating the development of WII and its faculty in its formative stages. An important by-product has been the establishment of formal as well as informal scientific information exchange relationships between the WII faculty and a large number of research, training and management institutions and agencies in the U.S.

When the Indo-U.S. project between the WII and FWS was completed in June 1994, a second phase was approved, in 1995, to run for another 5 years. The second phase was envisaged to consolidate the gains obtained thus far and expand the application of modern wildlife research and management techniques. Phase II was made up of 7 specific projects on management oriented biodiversity research and on developing laboratory and field technology and curriculum, conducted by Indian scientists with the support of U.S. scientists.

The 7 projects under Phase II were as follows:

1) Identification of potential areas for conserving biodiversity in the Indian Himalaya.
2) Evaluation of Panna National Park in Madhya Pradesh with special reference to the ecology of sloth bear.
3) The relationships among large herbivores, habitat and humans in Rajaji-Corbett National Parks.
4) Impact of fragmentation on the biological diversity of rainforest small mammals and herpetofauna of the Western Ghat mountains, south India.
5) Establishment of an Indian Cooperative Wildlife Health Programme.
6) Establishment of a wildlife forensic capacity at the WII.
7) Planning and development of interpretive facilities in selected protected areas in India.

The WII and the FWS remained the main collaborating agencies under this programme. Several of the projects were extended for an additional year. All are essentially completed as of date, although the overall programme is not yet formally completed. Several U.S. and Indian organisations were also involved in the completion of the programme, including the Indira Gandhi National Forest Academy (IGNFA; formerly FRI), Dehra Dun, Sálim Ali Centre for Ornithology and Natural History (SACON), Coimbatore, and 4 veterinary colleges.

The results from this collaborative phase are not yet all in. But it is clear that a long-term professional relationship has been established between WII and FWS. The programme has fostered similar relationships with other major conservation agencies such as the USDA Forest Service, the U.S. National Park Service, the U.S. Geological Survey's Biological Resources Division as well as several universities. The programme has enabled WII faculty to develop professional links with a host of scientists and institutions around the world.

Although the collaboration with FWS was designed to provide the most useful modern technologies relevant to Indian wildlife work, the more lasting legacy may be the inculcation of problem solving capabilities employing a scientific method, and the opening up of the WII to take up an important role in the global conservation scene. WII is now recognised not only in India, but also internationally, as a major centre for training and research in wildlife conservation in Asia.

I would like to conclude by saying that the FWS is proud of its role in helping further the cause of wildlife conservation in India.

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